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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,314	04/13/2004	Neo Chee Peng	303.772US2	4743
21186 7590 02/11/2008 SCHWEGMAN, LUNDBERG & WOESSNER, P.A. P.O. BOX 2938 MINNEAPOLIS, MN 55402				
EXAMINER				
HEINRICH, SAMUEL M				
ART UNIT		PAPER NUMBER		
1793				
MAIL DATE		DELIVERY MODE		
02/11/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/823,314

Applicant(s)

PENG ET AL.

Examiner

Samuel M. Heinrich

Art Unit

1725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-53 is/are pending in the application.
- 4a) Of the above claim(s) 28-53 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 8-27 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SG/US)
- Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Election/Restriction

Claims 28-53 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made without traverse in the reply filed on June 28, 2007.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 8-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,669,801 to Yoshimura et al in view of USPN 6,211,488 to Hoekstra et al in view of US20030006795A1 to Asayama et al.

Yoshimura describes (column 12, lines 36-46) well known forming of scribe lines which are later cut with a saw.

Hoekstra et al describe (column 4, lines 25-31) well known initial scribing with a laser and locating a coolant stream adjacent the scribe beam.

Asayama et al describe [0078] dicing in which a rotating cutting blade having a width of about 50 micron completely cuts through a scribe region having about 100 micron width.

The instant claimed laser scribing with coolant and subsequent mechanical cutting would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art because the features of scribing with subsequent cutting, laser scribing with coolant, and scribing followed by completely cutting through with a rotating cutting blade are well known in the art as equivalent scribing and cutting steps. The instant claimed scribe depth would have been obvious through routine experimentation with a particular workpiece because scribing is very old and well known. The limitations of the dependent claims are known in the prior art and stand or fall with the independent claims.

Claims 9, 15, 18, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,669,801 to Yoshimura et al in view of USPN 6,211,488 to Hoekstra et al in view of US20030006795A1 to Asayama et al as applied to claims 8, 14, 17, and 24 above and further in view of USPN 6,611,540 to Mueller. Mueller describes "low duty cycles" and laser light power levels of 100W to kilowatts used in industrial laser cutting. The use of an industrial laser would have been obvious at the

time applicant's invention was made to a person having ordinary skill in the art in order to provide continuous work on a production schedule.

Claims 11, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,669,801 to Yoshimura et al in view of USPN 6,211,488 to Hoekstra et al in view of US20030006795A1 to Asayama et al as applied to claims 10 and 16 above, and further in view of USPN 3,691,707 to Von Arx et al. Von Arx et al describe well known wafer cutting with a diamond nickel saw and the use thereof would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art in order to cut with easily available apparatus.

Claims 17 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,669,801 to Yoshimura et al in view of USPN 6,211,488 to Hoekstra et al in view of US20030006795A1 to Asayama et al as applied to claims 16 and 24 above, and further in view of USPN 6,008,069 to Yamada. Yamada discloses a rotary blade dicing feed speed of about 100 mm/sec and the use thereof would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art because it provides rapid dicing and acceptable chipping.

Response to Arguments

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel M. Heinrich whose telephone number is 571-272-1175. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. Johnson can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Samuel M Heinrich
Primary Examiner
Art Unit 1725

/Samuel M Heinrich/
Primary Examiner, Art Unit 1725